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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,642	10/11/2001	Robert E. Haines	10007583-1	2054

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HEWLETT-PACKARD COMPANY	
Intellectual Property Administration	
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EXAMINER	
POND, ROBERT M	

ART UNIT	PAPER NUMBER
3625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/976,642

Applicant(s)

HAINES ET AL.

Examiner

Robert M. Pond

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Interview Summary 5/24/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-20 and 28-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-20 and 28-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. The final office action was withdrawn on 22 May 2006 as noted in the Interview Summary entered 24 May 2006. All pending claims 1-4, 6-20, and 28-40 were examined in this non-final office action necessitated by new grounds of rejection.

Specification

1. The disclosure is objected to because of the following informalities: Pertaining to Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74 is required. A brief description of Figure 7 is missing. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. **Claims 1-4, 6-14, 15-20, and 28-40 are rejected under 35 USC 103(a) as being unpatentable over Hayward (US 6,798,997) in view of IA (Paper**

Art Unit: 3625

#20050808, Item: UU, Internet Appliances), further in view of M2P (PTO-892, Item: U).

Hayward teaches an automatic supply ordering system for electronically ordering a consumable component or replaceable part in a marking machine (i.e. hardcopy output device: fax, copier, printer, scanner, xerographic device, electrostatic device) (see at least abstract; col. 1, lines 1-29). Hayward teaches the marking apparatus with an embedded web browser may electronically initiate a purchase offer, electronically receive an acceptance of the purchase offer, and electronically form a contract with a supplier for purchase of the replaceable part or consumable component (see at least Fig. 8 (11); col. 9, lines 21-26; col. 9, lines 33-44), and communicates information relating to the condition of the consumable component to a second device, a supplier, user, or third-party (see at least col. 9, lines 43-46). Hayward teaches the consumable part may include ink, ink cartridge, toner, toner cartridge, paper, photoreceptor cartridge, and printhead (see at least col. 9, lines 40-42). Hayward states that the marking apparatus (8) of Figure 8 may include all or part of the features and functions as previously described in Figs 2-7 (see col. 10, lines 10-12) spanning col. 1, line 30-col. 8, line 63. Hayward further teaches:

- first determining, by a processor within a peripheral device, that an amount of a consumable associated with the peripheral device has decreased below a predetermined threshold; processor, software, and logic system regularly or intermittently receive information on the status of

the consumable used by the marking machine. The threshold conditions of the consumable component 11 may include a measure, timing, or data such as: supply; wear; usage; rate of depletion; rate of wear; predicted date of depletion of supply; predicted date of need of consumable component 11; delivery schedule of consumable component; and statistical data for consumable component 11 (see at least Fig. 8 (11, 12, 16); col. 8, line 64-col. 9, line 32); threshold conditions detected: The condition may be used to indicate when a consumable has been exhausted (e.g., paper tray empty) or a consumable has reach a predetermined threshold (e.g., magenta ink level low). Preferably, the condition indicates when the consumable has reached a threshold in time to reorder before the consumable is completely exhausted (see at least Fig. 8; col. 8, lines 26-31).

- first transmitting an email from the peripheral device to order additional supplies of the consumable, and wherein the peripheral device comprises a hard copy output engine, A modem 34, Internet connection 36, or server 40 may be used to electronically communicate the information from the marking apparatus 8 to the remote output device 50 regarding the condition of the consumable component 11 and automatically initiate an electronic order for a replacement of the consumable component 11 (see at least col. 9, lines 20-26); the marking apparatus with an embedded web browser may electronically initiate a purchase offer, electronically receive

an acceptance of the purchase offer, and electronically form a contract with a supplier for purchase of the replaceable part or consumable component (see at least Fig. 8 (11); col. 9, lines 33-44), and communicates information relating to the condition of the consumable component to a second device, a supplier, user (i.e. computer associated with the marking apparatus), or third-party (see at least col. 9, lines 43-46); electronically communicates information relating to the consumable condition to an address (URL, e-mail, facsimile, telephone) defined by the condition (see at least col. 2, lines 25-33); hard copy output engine: imaging apparatus, marking apparatus (see at least

and further comprising:

- second determining, by the processor within the hard copy output engine, when a predetermined work threshold has been reached; the condition is used to indicate when a consumable has been exhausted (e.g. paper tray empty) (please note: the Applicant's instant specification associates "work" with consumption of paper), or a consumable has reach a predetermined threshold (e.g., magenta ink level low) (see at least col. 5, lines 6-12; col. 8, lines 26-31); the threshold conditions of the consumable component 11 may include a measure, timing, or data such as: wear, usage, rate of depletion, rate of wear, predicted date of depletion of supply (see at least col. 9, lines 25-32); tracks number of pages printed (see at least col. 8, line s 32-34); across a firewall. see below.

- first e-mail to computer associated with the peripheral device, second email from the computer to a vendor web site. the marking apparatus may be used to communicate with a user or a remote output device, or may bypass the remote output device (see at least Fig. 8 (8, 21, 50); col. 9, lines 4-6) (please note: user computer depicted in Fig 2 (40) is a user computer associated with the marking apparatus); marking apparatus communicates work or consumable condition to the remote output device (see at least col. 9, line 21-32) (please note: referring to Fig. 2, the remote output device is the user computer associated with the marking apparatus); if the marking apparatus is communicating with a user computer associated, and threshold conditions warrant it, the user on a computer associated with the marking apparatus sends email to vendor site to order consumable (see at least Fig. 7, col. 54-col. 8, line 12). the marking apparatus (i.e. printer, copier) can be connected to the Internet directly, to a server associated with the marking apparatus, and/or directly to a remote output device (see Fig. 8 (8, 36, 40, 50); col. .
- first determining, determining when a toner level in the hard copy output engine has decreased below a toner low threshold. threshold conditions detected: the condition may be used to indicate when a consumable has been exhausted (e.g., paper tray empty) or a consumable has reach a predetermined threshold (e.g., magenta ink level low). Please note: Hayward discloses a toner cartridge as a consumable. Implied that a

predetermined threshold can be toner low condition (Hayward: see at least col. 9, lines 40-42).

- Computer readable medium:
- Peripheral devices: fax, copier, scanner, printer (see at least Fig. 3 (col. 1, lines 20-23; col. 5, lines 23-27)).

Hayward teaches all the above as noted under the 103(a) rejection and teaches i) the condition information may relate to: a present condition of the consumable component; a prediction of a future condition of the consumable component; an inquiry relating to the consumable component; or a purchase order of the consumable component, and the marking apparatus may predict a future condition of the consumable component prior to sending a signal, and ii) a consumable being sheets of paper and a print head. Although Hayward does not directly disclose a predetermined work threshold comprising a predetermined number of sheets, it would have been obvious to one of ordinary skill in the art at time the invention was made to ascertain print head deterioration is associated with marking sheets of paper by the print head and that predicting a future condition of the print head can be based on the number of printed sheets.

Hayward teaches all that is noted above in the 103(a) rejection and teaches i) improvements made to peripheral devices (i.e. printers, copiers) in providing indicators alerting users to the need for assistance or maintenance support, and ii) said indicators indicating work and consumable conditions of the peripheral device, and iii) sending e-mail alerts to a user, a supplier, server, or other

devices. Although Hayward does not disclose second transmitting an email to request periodic service in response to the second determining, Hayward in view of IA teach and suggest the claimed invention. IA teaches Internet technologies working their way into printers, copiers, and other peripheral devices. IA teaches using Internet appliance technology in a network printer that enables the printer to notify an administrator when the printer is running out of paper, needs toner, or has a paper jam. IA teaches having an Internet appliance send e-mail for service notification, and further teaches more complex devices requiring periodic (please note: recurring interval of time, time being predetermined) or instant maintenance whereby the appliance can alert an administrator by sending an urgent e-mail to an administrator (Paper #20050808, Item: UU, pages 1-2). Therefore it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Hayward's invention that sends e-mail notification alerts pertaining to work and consumable threshold conditions to include sending e-mail notifications for periodic or instant maintenance as taught by IA, in order to provide communicate other printer status information useful to maintaining complex computing equipment.

Although Hayward does not disclose the marking apparatus (i.e. printer, copier) comprising an embedded web server, Hayward in view of IA teach and suggest the claimed invention. IA teaches all the above as noted under the 103(a) rejection and further teaches:

- with a web browser, a user can have two-way communication with a device that has an embedded web server (i.e. HTTP server) and appropriate HTML pages; and
- using the ubiquitous web browser interface (i.e. in communication with the embedded web server in the peripheral) frees product manufacturers from the grip of special graphics and graphical editors, eliminates the need to support multiple operating systems, and eliminates the distribution of user interface software.

Therefore it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Hayward's marking apparatus by embedding a web server in a printer, copier, or other device as taught by IA, in order to eliminate the need for special software editor software, to support multiple operating systems, and the distribution of user interface software, and thereby minimize the peripheral manufacturer's support costs. One of ordinary skill in the art would recognize the elimination of special software, support for multiple operating systems, and distribution of user interface software would reduce product cost and product support costs.

Hayward and IA teach all the above as noted under the 103(a) rejection and teach and suggest i) the marking apparatus electronically communicating a need for consumables directly with a supplier or indirectly via a user, and ii) communicating a need for periodic service to an administrator. Although Hayward and IA do not specifically disclose communicating a need for periodic

service directly from the marking apparatus to a provider that performs the periodic service, it would have been obvious to one of ordinary skill in the art at time of the invention to communicate with a service provider directly as does the marking apparatus communicates directly with vendor for product.

Hayward and IA teach and suggest all the above as noted under the 103(a) rejection and teach and suggest i) Internet printers communicating with suppliers, users, or administrators, ii) Internet appliances, iii) embedding web servers into Internet appliances, and iv) Internet printers with embedded web server communicating with a supplier, a user, or administrator using e-mail. Although Hayward and IA do not disclose communication across a firewall, Hayward and IA further in view of M2P teach the claimed invention. M2P teaches Xerox (assignee of Hayward patent) upgrading their DocuPrint N Series Network Laser Printer family with a free upgrade that allows small and networked-office customers (i.e. users as referred to below) to e-mail print jobs to the printers from anywhere in the world via the Internet. M2P teaches the e-mail system letting users print documents by sending them to the printer in an e-mail, avoiding obstacles like network firewalls or incompatible software. M2P further teaches MailinX can also notify users with an e-mail alert when the printer needs toner, paper, or service, which makes printer management more efficient (please note: emails in two-way communication across a firewall but firewall is not an obstacle due to use of e-mail) (U: see page 2). Therefore it would have been obvious to one of ordinary skill in the art a time the invention was made to modify Hayward

Art Unit: 3625

and IA to e-mail from the Internet printer the need for toner or service across a firewall as taught by M2P, in order to communicate a purchase or service request across a firewall protected network.

Pertaining to claims 8-14

Rejection of claims 8-14 is based on the same rationale as noted above.

Pertaining to claims 15-20


Rejection of claims 8-14 is based on the same rationale as noted above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Pond whose telephone number is 571-272-6760. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jeff Smith can be reached on 571-272-6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert M. Pond
Primary Examiner
April 18, 2007